

ABSTRACT

The invention relates to an intelligent laminated pressure surface. The inventive surface comprises: an elastic sheet comprising a plurality of holes, the holes extending from the surface to the base thereof; and two sheets having inner conductive faces which substantially cover respective sides of the holes. In one embodiment, the aforementioned pressure establishes contact between the conductive faces through the holes, thereby closing an electrical or optical conductor circuit. The invention can be used to locate determined pressures, evaluate the frequencies and intervals thereof and measure a pressure level or several pressure levels if more than one of the above-mentioned groups of sheets are disposed back-to-back. Moreover, the invention comprises an integrated conductor circuit and an antenna which alerts the user by an alarm or reading device. The invention is particularly suitable for medical applications, such as in the prevention of diabetes foot, decubitus ulcers, etc.